File 351:Derwent WPI 1963-2001/UD,UM &UP=200152
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72 Updates in 2001. Please see HELP NEWS 351 for details.

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DIALOG(R)File 351:Derwent WPI

008829771 **Image available**
WPI Acc No: 1991-333787/199146
XRAM Acc No: C91-144039
XRPX Acc No: N91-255770
Producing fine irregular engaged patterns on polished metal surfaces - using interference strips produced by overlapping laterally displaced laser beam with original beam
Patent Assignee: OSAKA FUJI KOGYO KK (FUJA); OSAKA PREFECTURE (OSAP)
Inventor: HIRATA S; MIYAMOTO H; MORIWAKI K; NAGATA I; OKANO Y; OSHIMA I; OSHIMA T
Number of Countries: 002 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4106151	A	19911107	DE 4106151	A	19910227	199146	B
JP 4091874	A	19920325	JP 90206980	A	19900803	199219	
JP 4091875	A	19920325	JP 90206981	A	19900803	199219	
JP 95004675	B2	19950125	JP 90206980	A	19900803	199508	
JP 95045111	B2	19950517	JP 90206981	A	19900803	199524	

Priority Applications (No Type Date): JP 90206981 A 19900803; JP 90U46967 U 19900502; JP 90206980 A 19900803; JP 90U82827 U 19900803
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 4091874	A		5		
JP 4091875	A		4		
JP 95004675	B2		4	B23K-026/00	Based on patent JP 4091874
JP 95045111	B2		4	B23K-026/00	Based on patent JP 4091875

Abstract (Basic): JP 4091875 A
A metallic ornamental part based on stainless steel or a Ni-Cr based alloy has fine irregularities on the surface corresponding to the intensity of interference fringes of a laser beam having irradiated on the metal, and further having a precious metal coating at such a thickness that the surface irregularities are maintained.
The precious metal coating is pref. a thin film 1 micron or less in thickness of Au, Ag, and/or Pt.
USE/ADVANTAGE - Provides metallic ornaments having elaborate appearance using low cost metals; useful as accessories, watch faces, art crafts, cutleries, etc.
JP 4091874 A
The rainbow colouring used for decorative appearance for metal parts includes mirror surface prepn. by electrolytic polishing for the work metal surface. Finely distributed irregular surface pattern corresp. to intensity distribution pattern of interference fringes

resulting from interference radiation of laser beam is formed.

ADVANTAGE - Clear and apparent finely distributed irregular surface pattern is obtd..

DE 4106151 A

Laser beam process for working the smooth surface of a metal substrate consists of lateral displacement of a part of the beam to produce the orginal beam with an overlapping secondary beam. After focussing the overlapping beams onto a metal surface interference strips are created in the overlapping zone which lead to a fine irregular engraved pattern on the surface.

USE/ADVANTAGE - Used for creating fine engraved patter, on clock arms face and surrounding frame. The fine irregular patterns have a depth of not more than 1 micron which produce delicate rainbow colouring effects.

Dwg.1/27

Title Terms: PRODUCE; FINE; IRREGULAR; ENGAGE; PATTERN; POLISH; METAL; SURFACE; INTERFERENCE; STRIP; PRODUCE; OVERLAP; LATERAL; DISPLACE; LASER; BEAM; ORIGINAL; BEAM

Derwent Class: M23; P55; P78; S04; V07; X24

International Patent Class (Additional): B23K-026/06; B23K-026/60; B44C-001/22; B44F-001/02; B44F-001/14; C25F-003/16; G04B-019/10; G04B-037/22; H01S-003/11

File Segment: CPI; EPI; EngPI

L4 ANSWER 1 OF 1 WPINDEX COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 91-333787 [46] WPINDEX
DNN N91-255770 DNC C91-144039
TI Producing fine irregular engaged patterns on polished metal surfaces - using interference strips produced by overlapping laterally displaced laser beam with original beam.
DC M23 P55 P78 S04 V07 X24
IN HIRATA, S; MIYAMOTO, H; MORIWAKI, K; NAGATA, I; OKANO, Y; OSHIMA, I; OSHIMA, T
PA (FUJA) OSAKA FUJI KOGYO KK; (OSAP) OSAKA PREFECTURE
CYC 2
PI DE 4106151 A 911107 (9146)*
JP 04091874 A 920325 (9219) 5 pp <--
JP 04091875 A 920325 (9219) 4 pp
JP 07004675 B2 950125 (9508) 4 pp
JP 07045111 B2 950517 (9524) 4 pp
ADT DE 4106151 A DE 91-4106151 910227; JP 04091874 A JP 90-206980 900803; JP 04091875 A JP 90-206981 900803; JP 07004675 B2 JP 90-206980 900803; JP 07045111 B2 JP 90-206981 900803
FDT JP 07004675 B2 Based on JP 04091874; JP 07045111 B2 Based on JP 04091875
PRAI JP 90-U46967 900502; JP 90-U82827 900803; JP 90-U82828 900803; JP 90-206980 900803; JP 90-206981 900803
AB DE 4106151 A UPAB: 930928
Laser beam process for working the smooth surface of a metal substrate consists of lateral displacement of a part of the beam to produce the orginal beam with an overlapping secondary beam. After focussing the overlapping beams onto a metal surface interference strips are created in the overlapping zone which lead to a fine irregular engraved pattern on the surface.

USE/ADVANTAGE - Used for creating fine engraved patter, on clock arms face and surrounding frame. The fine irregular patterns have a depth of not more than 1 micron which produce delicate rainbow colouring effects. @(25pp Dwg.No.1/27)@

File 351:Derwent WPI 1963-2001/UD,UM &UP=200152
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DIALOG(R)File 351:Derwent WPI

010151514 **Image available**
WPI Acc No: 1995-052766/199508
XRPX Acc No: N95-041438
Egg shell marking appts. providing e.g. date and producer name on egg - using laser beam to remove material from upper layers of shell, with beam being controlled by egg testing station
Patent Assignee: GARTZEN J (GART-I); GEBHARDT A (GEBH-I)
Inventor: GARTZEN J; GEBHARDT A
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4322252	A1	19950119	DE 4322252	A	19930703	199508	B
DE 4322252	C2	19950629	DE 4322252	A	19930703	199531	

Priority Applications (No Type Date): DE 4322252 A 19930703
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4322252	A1		5	B23K-026/00	
DE 4322252	C2		5	B23K-026/00	

Abstract (Basic): DE 4322252 A
The chosen marking symbols (3) are introduced directly onto the upper shell layers by a laser (4) with appropriate power output. The upper layer of the shell is first removed in these positions. The laser beam is adjusted so that it produces a dot-shaped impact area to form removal lines on the egg shell (2). The beam is translated or pivotted to produce these lines.
Alternatively, a mask (5) with required light passage openings is inserted between the laser and the egg. Markings on the egg shell can include quality information from signals received by the laser control unit (8) from an egg testing station (7).
ADVANTAGE - The markings cannot be erased or profitably altered.
Dwg.1,2/2
Title Terms: EGG; SHELL; MARK; APPARATUS; DATE; PRODUCE; NAME; EGG; LASER; BEAM; REMOVE; MATERIAL; UPPER; LAYER; SHELL; BEAM; CONTROL; EGG; TEST; STATION
Derwent Class: P14; P55; P85; X24; X25
International Patent Class (Main): B23K-026/00
International Patent Class (Additional): A01K-043/10; G09F-007/16
File Segment: EPI; EngPI

2/5/1
DIALOG(R)File 347:JAPIO

05092284 **Image available**
MARKING METHOD OF BLISTER PACKAGING SHEET

PUB. NO.: 08-047784 JP 8047784 A]
PUBLISHED: February 20, 1996 (19960220)
INVENTOR(s): KIYOSAKI TOSHIO
APPLICANT(s): CKD CORP [352350] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 06-184641 [JP 94184641]
FILED: August 05, 1994 (19940805)
INTL CLASS: [6] B23K-026/00; B65D-025/20; B65D-075/36
JAPIO CLASS: 12.5 (METALS -- Working); 31.1 (PACKAGING -- General); 31.2 (PACKAGING -- Containers)
JAPIO KEYWORD:R002 (LASERS)

ABSTRACT

PURPOSE: To obtain the marking method easy for change of display as well as visually dis criminative by using PVC for container film and gas laser light for laser light in blister packaging.

CONSTITUTION: In a blister packaging line, a laser beam marking device 10 has a laser oscillator 11 and irradiating part 12 of laser beam, marking is executed by aligning/scanning a beaming spot to a marking shape. By using PVC for container film F, irradiation of laser beam makes the irradiated part to sublimate or evaporate to form recessed part and discolor the surface. CO(sub 2) laser beam having the wave length suitable for film heating is used for laser beam. Further, because CO(sub 2) laser beam can heat film by a wave length of 10.mu.m, the marking, which is easy for changing display such as commodity description, lot number, etc., and visually dis criminative, is made possible.

3/5/1
DIALOG(R)File 347:JAPIO

05097621 **Image available**
STAINLESS STEEL CONTAINER

PUB. NO.: 08-053121 JP 8053121 A]
PUBLISHED: February 27, 1996 (19960227)
INVENTOR(s): TAKAHASHI KAZUYOSHI
YAMAGUCHI TOSHIO
APPLICANT(s): NASU TOA KK [366096] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 06-188639 [JP 94188639]
FILED: August 10, 1994 (19940810)
INTL CLASS: [6] B65D-001/12; B23K-026/00; B65D-008/04
JAPIO CLASS: 31.2 (PACKAGING -- Containers); 11.4 (AGRICULTURE -- Food Products); 12.5 (METALS -- Working)
JAPIO KEYWORD:R002 (LASERS); R012 (OPTICAL FIBERS); R098 (ELECTRONIC MATERIALS -- Charge Transfer Elements, CCD & BBD)

ABSTRACT

PURPOSE: To obtain a stainless steel container on which an identification number can be marked clearly.

CONSTITUTION: An identification number (control number) N is marked directly to the surface 2a of a stainless steel container (a beer barrel) 1 by means of shedding laser beams. The surface of the beer barrel 1 is locally heated by energy of the laser beams. As the identification number N is marked on the heated spot when the heated spot is melted instantaneously, the container 1 does not deform on occasion of marking the identification number. As film is formed on heating and melting made locally by shedding of the laser beams by oxidation of ingredients (iron oxide, chromium oxide, etc.) included in the stainless steel, black marks are left to the part irradiated with the laser beams, and the identification number N can be marked clearly with sharp contrast made between the part irradiated and the part not irradiated with the laser beams. The identification number N is hard to be erased even though the stainless steel container is used for a long period of time.

File 351:Derwent WPI 1963-2001/UD,UM &UP=200157
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72 Updates in 2001. Please see HELP NEWS 351 for details.

1/5/1
DIALOG(R)File 351:Derwent WPI

010450229 **Image available**
WPI Acc No: 1995-351546/199546
XRPX Acc No: N95-262172
Ring pull or pull tab for beverage can - as advertising indicia die stamped during process of pressing out ring pull from sheet metal.
Patent Assignee: NEW ZEALAND CAN LTD (NZCA-N)
Inventor: BAKER K B
Number of Countries: 000 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
AU 9481794	A	19950921	AU 9481794	A	19941230	199546	B

Priority Applications (No Type Date): NZ 260090 A 19940314
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 9481794	A		18	B21D-051/44	

Abstract (Basic): AU 9481794 A
The ring pull or pull tab includes an indicium or indicia stamped upon a surface of it and in which the ring pull or pull tab is made of metal or other material capable of receiving and retaining an impression from a die forming the indicium or indicia. The indicium is stamped on a surface presented to the outside of the can so that it is visible before the pull tab is pulled.
The indicium is in the form of an alphanumeric character. The indicium includes a less obvious marking as an aid against forgery.
Dwg.2/4
Title Terms: RING; PULL; PULL; TAB; BEVERAGE; CAN; ADVERTISE; INDICIA; DIE; STAMP; PROCESS; PRESS; RING; PULL; SHEET; METAL
Derwent Class: P52; Q32
International Patent Class (Main): B21D-051/44
International Patent Class (Additional): B21D-051/38; B65D-017/34
File Segment: EngPI

1/5/1
DIALOG(R)File 347:JAPIO

01249691 **Image available**

METHOD AND APPARATUS FOR MARKING

PUB. NO.: 58-187091 A]
PUBLISHED: November 01, 1983 (19831101)
INVENTOR(s): YAMAMOTO TSUKASA
OOTANI HIROSHI
ITO HIROTAKA
HAYASHI TETSUO
NOMURA FUMINORI
APPLICANT(s): KANEBO LTD [000095] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 57-071081 [JP 8271081]
FILED: April 26, 1982 (19820426)
INTL CLASS: [3] H04N-007/18; B41C-001/02; B41F-017/36; B41M-005/00; B42D-015/02; B44B-001/00; B44C-001/22; B41J-003/00; H04N-001/26
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 29.4 (PRECISION INSTRUMENTS -- Business Machines); 30.9 (MISCELLANEOUS GOODS -- Other); 44.7 (COMMUNICATION -- Facsimile)
JAPIO KEYWORD:R002 (LASERS)
JOURNAL: Section: E, Section No. 225, Vol. 08, No. 25, Pg. 109, February 02, 1984 (19840202)

ABSTRACT

PURPOSE: To attain the system of one marking for one thing quickly, by picking up an original picture, obtaining a binary-coding picture data, setting on and off a laser beam, scanning the surface of an object to be marked through rester for the processing.

CONSTITUTION: An arbitrary original picture 1 is picked up at a television camera 2 and a picture analog data is obtained. This picture is resolved into a matrix comprising cross points between scanning lines and sampling lines with a controller 4 to binary-encode so that the characters and graphs of the original picture 1 go to 1 level and the other parts go to 0 level. The data are converted into parallel data at a computer 5 and stored in a storage section 6. The data stored in the storage section 6 is read out sequentially at a laser cntrol computer 7 and a laser oscillator 8 is controlled. The oscillator 8 sets on and off the laser beam with a binary-coded data to process the characters and graphs of the arbitrary design on the surface of an object to be marked 15.

L1 ANSWER 1 OF 1 JAPIO COPYRIGHT 1998 JPO and Japio
AN 95-004675 JAPIO
TI OVEN EQUIPPED TURN TABLE
IN NAKAJIMA YASUMASA
PA RINNAI CORP, JP (CO 328623)
PI ***JP 07004675*** A 19950110 Heisei
AI JP 93-7626 (JP05007626 Heisei) 19930120
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 95, No. 1
AB PURPOSE: To prevent hot air from entering the space under the floor of a heating chamber housing and hereby prevent a rotation driving mechanism and weight detection means from being exposed to high temperature by disposing a gasket for sealing the portion between the internal periphery of a hole and the outer periphery of a driving shaft on the lower surface of a bottom plate of the heating chamber housing.
CONSTITUTION: A gasket 8 is disposed on the lower surface of a bottom plate 13 of a heating chamber housing for sealing the portion between the inner periphery of a hole 14 in the bottom plate 13 and the outer periphery of the driving shaft 52. Hence, hot air is prevented from leaking under the bottom plate 13 and hence a rotation driving mechanism 5 and weight detection means are prevented from being exposed to high temperature whereby the detection accuracy is prevented from being lowered and any failure is prevented from being produced. Further, the gasket 8 is formed with a high heat resistant plate material and includes a round hole 14 with a smaller diameter than the outer periphery of the driving shaft 52 and further has a configuration where a notch is formed radially from the round hole 14. Accordingly, the gasket is in contact with the outer periphery of the driving shaft by being extended in its diameter whereby hot air is prevented from entering the space under the floor and hence the weight detection accuracy is prevented from being lowered.

L2 ANSWER 1 OF 1 JAPIO COPYRIGHT 1998 JPO and Japio
AN 95-045111 JAPIO
TI BULB PROVIDED WITH REFLECTING MIRROR AND BULB
IN KAWAKATSU AKIRA
PA TOSHIBA LIGHTING & TECHNOL CORP, JP (CO 461465)
PI ***JP 07045111*** A 19950214 Heisei
AI JP 93-208924 (JP05208924 Heisei) 19930731
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 95, No. 2
AB PURPOSE: To prevent degradation of an objective for radiation regarding a bulb provided with a reflecting mirror for general lighting and a bulb to be used for a shopping outlet and a showroom. CONSTITUTION: A bulb provided with a reflecting mirror comprises a reflecting mirror, a bulb arranged on the inside of the reflecting mirror, a cover glass sheet 6 provided on the front surface of the reflecting mirror, and an ultraviolet ray/infrared ray reflecting film 7 formed either on the inner surface or the outer surface of the cover glass sheet 6. The ultraviolet ray (of the wavelength range of no more than approximately 380nm) is absorbed by a zinc oxide(ZnO) itself by means of the ultraviolet ray/infrared ray reflecting film 7, and the infrared ray is cut, while the ultraviolet ray (of the wavelength range of no more than approximately 380nm) and the infrared ray (of the wavelength range of no less than 760nm) are cut, and visible light (no less than approximately 380nm and no more than 760nm) is transmitted.